

**REMARKS**

Claims 1 and 5-8 are rejected as anticipated by *Maruya* (EP 0987897). The Applicant respectfully traverses this rejection.

The rejection asserts that *Maruya* discloses a method including, among other steps, removing the picture header from each video picture frame to be included in the spatial multiplex video picture frame. That step is indeed among the steps making up the method defined by Claims 1 and 5-8. However, *Maruya* does not disclose that step, namely, removing the picture header from each video picture frame.

The rejection refers to the abstract and paragraphs 0009 and 0022-0046 of *Maruya* as supporting the anticipation rejection. However, a close reading of those sections does not disclose removing the picture heading from each video picture frame. Thus, paragraph 0025 points out that *Maruya* analyzes the header information of the moving picture code string and generates header information of a synthesized moving picture code string. That reference further mentions (column 8, lines 15-17) rewriting the display position information of the moving picture code string, which the Applicant surmises —although is not certain— may arguably correspond to his step of "altering the *component headers* of each video picture frame..." in the present invention. *Maruya* then issues the synthesized moving picture code string 109, together with the generated header information of that synthesized picture. Nowhere does *Maruya* mention the step of removing the picture header from each video picture frame.

A similar reading of paragraphs 0034-0041 brings the same conclusion. Those paragraphs discuss *Maruya's* synthesis process, including the step of analyzing the header information of each code string (column 9, lines 42-44). Removing the picture headers is

not discussed. Indeed, *Maruya's* requirement to *analyze* the header information of each picture code string is inconsistent with the Applicant's step of *removing* the picture header. Accordingly, the reference fails to anticipate the method defined by Claim 1 and by the claims dependent thereon.

Regarding dependent Claim 5, furthermore, the rejection asserts that step 108 of *Maruya* anticipates the claim step of transmitting the spatial multiplex video picture frame to a network interface. However, *Maruya* identifies that step as "the synthesized picture code string output part 108" that sequentially links the removing picture code strings rewritten in the display position information, and issues the synthesized picture code string 109 together with the generated header information of that code string (column 8, lines 17-22). Nowhere does *Maruya* mention a network interface or transmitting spatial multiplex video picture frame to a network interface.

Claims 2, 4, 9-12, 14, 15, 17, and 18-20 are rejected under 35 U.S.C. § 103(a) as unpatentable over *Maruya* in view of *Tucker* (US 6,590,604). *Tucker* discloses a personal video conferencing system. The Applicant respectfully traverses this rejection.

Dependent Claim 2 adds the steps of receiving the video picture frames from a plurality of locations through a network, and sending the resulting spatial multiplex video picture to those plural locations through the network. Claim 4, depending from Claim 2, adds that a plurality of devices send the video pictures being received, together with the further steps of negotiating a compatible mode of operation with those plural devices, and broadcasting a start indicator to the devices to synchronize transmission of the video picture frames.

To begin with, Claims 2 and 4 both incorporate from Claim 1 the limitation of removing the picture header from each video picture frame to be incorporated in the spatial multiplex video picture frame. *Maruya* fails to teach that step, as mentioned above. *Tucker* likewise fails to teach that step and, of course, was not cited for that purpose. Accordingly, one of ordinary skill would not find, in those cited teachings, any suggestion of removing the picture header from each video picture frame as required by the method defined in Claims 2 and 4.

Further yet, the Applicant submits that one of ordinary skill would not have found it obvious to combine the teachings of *Tucker* with those of *Maruya* in the manner suggested by this rejection. *Maruya* discloses a technique to produce a synthesized motion picture made up of individual motion pictures, and accomplishes that result by code string rewriting to define display position information of the component motion picture string in the synthesized picture. *Maruya* points out that his system avoids decoding all motion picture code strings of the materials to be synthesized (column 1, lines 28-32), thus avoiding the "tremendous amount of computation" required of such conventional decoding-encoding video transmission systems.

*Tucker*, in contrast with *Maruya*, discloses a point-to-point video conferencing system between parties. *Tucker* discloses video encoding and decoding of each frame (column 6, lines 32-47) and uses the conventional video encoding protocols such as H.261 and H.263 to encode quarter common intermediate format (QCIF) images. This latter approach and its associated computational requirement is also discussed in the Background of the Applicant's specification, commencing at line 25 on page 1 thereof.

It should now be understood that one of ordinary skill, knowing of the respective and divergent teachings in *Maruya* and in *Tucker*, would not have found it obvious to combine those teachings — at least in any way relevant to the present claimed invention. The respective systems disclosed in those references vary greatly in their approach to handling video frames, and combining those teachings would require a substantial if not total rewrite of *Tucker*. Accordingly, the Applicant submits that one of ordinary skill would not have found obvious the combination suggested by this rejection.

Regarding independent Claims 9, 14, and 18, as well as the claims depending therefrom, each includes the limitation of removing the picture header from video picture frames (Claims 14 and 18) or removing the picture header from video picture frames received through the data packet switch (Claim 9). *Maruya* fails to disclose or teach that limitation, as pointed out above. Accordingly, a system having the overall combination of elements recited in Claims 9, 14, and 18 would not have been obvious to one of ordinary skill based on *Maruya* in view of *Tucker*.

Claim 3 is rejected as unpatentable over *Maruya* in view of *Roy* (US 6,049,531). That dependent claim adds the further step of establishing a connection to the network through an asymmetric digital subscriber line, and wherein the video picture frames are received and the spatial multiplex video picture is sent through the asymmetric digital subscriber line network connection. Although *Roy* does disclose multimedia conferencing (including video) using ADSL access, neither that reference nor *Maruya* includes the limitation of removing the picture header from each video picture frame, as discussed above. Accordingly, the combination of *Maruya* in view of *Roy* would not have anticipated the method of Claim 3.


Claim 13 is rejected as unpatentable over *Maruya* in view of *Gu* (US 6,658,618). Claim 13 defines a system including certain sets of video picture frames formats, and *Gu* discloses a video processing and transmitting system including conversion of video-camera format to those recited formats. However, the proposed combination of *Maruya* in view of *Gu* still lacks the requirement to remove the picture header from video picture frames received through the data packet switch, incorporated through parent Claim 9. Nothing in either reference would have taught or suggested that limitation to one of ordinary skill. Accordingly, Claim 13 is patentable over those references.

Claim 16 is rejected as unpatentable over *Maruya* in view of *Tucker and Roy*. That claim indirectly depends from Claim 14, which includes the limitation of a processing device configure to remove the picture header from video picture frames. *Maruya* fails to disclose or suggest that limitation. Accordingly, one of ordinary skill would not have found it obvious to create a system including the limitations required by Claim 16, in view of the applied art.

The foregoing is submitted as a complete response to the Office Action identified above. The Applicant submits that this application is in condition for allowance and solicits a notice to that effect.

Respectfully submitted,

MERCHANT & GOULD



Roger T. Frost  
Reg. No. 22,176

Date: December 22, 2004

Merchant & Gould, LLC  
P.O. Box 2903  
Minneapolis, MN 55402-0903  
Telephone: 404.954.5100

